

KB



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,769	09/24/2001	Joseph Zyss	15675P366	1129

7590 12/31/2003
Blakely Sokoloff Taylor & Zafman
12400 Wilshire Boulevard 7th Floor
Los Angeles, CA 90025

EXAMINER

MOHAMEDULLA, SALEHA R

ART UNIT PAPER NUMBER

1756

DATE MAILED: 12/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/889,769

Applicant(s)

ZYSS ET AL.

Examiner

Saleha R. Mohamedulla

Art Unit

1756

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

DETAILED ACTION

Claims 1-13 are pending.

Election/Restrictions

1. The Restriction Requirement is withdrawn in view of the amendments to the claims.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over US# 4,775,970 to Ishii in view of US# 5,204,193 to Sato et al.

Ishii teaches A recording apparatus for an optical recording card. The apparatus comprises an optical recording card (10) provided with an optical recording medium (11), a recording light source (5) for recording an information signal on the recording medium (11), a reproduction light source (1) for reproducing the information signal recorded on the recording medium (11) and a line sensor (15) for reading out the information recorded on the recording medium (11) from the light beam reflected from the recording medium (11). A light path of a light beam emitted from the recording light source (5), a light path of a light beam emitted from the reproduction light source (1), and a light path of the light beam reflected by the recording medium (11) are independent of one another (Abstract and Figure 1). A laser beam is a laser

Art Unit: 1756

beam emitted from the laser beam source 1 is collimated through a collimator lens 2 into a parallel light beam. The parallel beam is then supplied to a rotary polygonal mirror 3. The light beam reflected by the rotary polygonal mirror 3 is incident through an objective 4 on the optical recording medium 11 of the optical recording card 10. The rotary polygonal mirror 3 reflects the laser beam as it is rotated at a predetermined timing. Thus, the optical recording medium 11 of the optical recording card 10 is scanned by the laser beam, whereby the information signal is successively optically recorded in individual pits. The rotary polygonal mirror 3 may be replaced with an optical scanner, e.g., a galvanomirror or a light modulator, for scanning the optical recording medium 11 of the optical card 10 with the laser beam (col. 3, lines 10-25). Therefore, Ishii teaches two mutually coherent light beams and generating the light beams through a structure in a guided configuration. Ishii does not teach modifying the orientation of the molecules of the molecular matter or controlling the temperature of the molecular matter.

Sato teaches a magneto-optical recording medium using a double-layered perpendicular magnetic layer (col. 2, lines 40-60 and col. 3, lines 1-10). The magnetic layer consists of a first layer having a low Curie point (TL) and a high coercive force (HH) and a second layer having a relatively high Curie point (TH) and low coercive force (HL). Upon irradiation with a laser beam, the medium is heated to a temperature higher than the low Curie point (TL) and lower than the high Curie point (TH). This causes the coercive force of the second layer to be reduced to an appreciably low level, though it may not be zero. Then, a stronger bias magnetic field (H_b) is applied to reverse the direction of magnetization in the second layer, thereby writing data into that layer. Since the second layer initially has a low coercive force (HL), a strong bias magnetic field need not be used to write data into this layer. Furthermore, the medium need not

Art Unit: 1756

be heated up to the high Curie point (TH), but simply to a temperature higher than the low Curie point (TL), and this permits the use of a low-power laser for data write. When the laser beam is removed, the medium cools down rapidly. As soon as the temperature of the first layer decreases below TL, the magnetization in the first layer is reversed by the already reversed magnetization in the second layer since the coercive force of the first layer still remains zero. This completes the writing of data in the first layer, which is generally referred to as TC writing. The recorded information is preserved by the first layer having high coercive force (HH), because even if a great external magnetizing force (He) comes near the medium accidentally, the magnetization in the first layer will not be reversed again, thereby preventing the loss of the already formed pits (erasure of the recorded information).

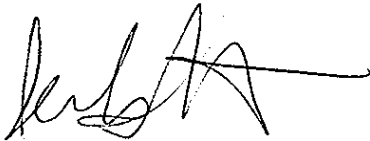
The references are analogous art as they are drawn to optical recording media. It would have been obvious to one of ordinary skill in the art to use the layers of Sato in the method of Ishii as Sato teaches the layered substrate is common in the art to use in laser beam writing systems (col. 3, lines 1-10).

Conclusion

3. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Saleha Mohamedulla whose telephone number is (703) 308-1260. The Examiner can normally be reached Monday-Friday, from 8:00 AM to 4:30 PM. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Mark Huff, can be reached on (703) 308-2464. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310. The After Final fax phone number is

Art Unit: 1756

(703) 872-9311. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

A handwritten signature in black ink, appearing to read 'Saleha R. Mohamedulla', with a stylized flourish at the end.

Saleha R. Mohamedulla
Patent Examiner
Technology Center 1700
December 15, 2003